

## Complete Summary

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### GUIDELINE TITLE

Screening for hypertension in adults.

### BIBLIOGRAPHIC SOURCE(S)

University of Texas at Austin, School of Nursing, Family Nurse Practitioner Program. Screening for hypertension in adults. Austin (TX): University of Texas at Austin, School of Nursing; 2002 May. 9 p. [30 references]

## COMPLETE SUMMARY CONTENT

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## SCOPE

### DISEASE/CONDITION(S)

Hypertension

### GUIDELINE CATEGORY

Evaluation  
Screening

### CLINICAL SPECIALTY

Family Practice  
Internal Medicine  
Nursing

### INTENDED USERS

Advanced Practice Nurses  
Nurses

Physician Assistants  
Physicians

## GUIDELINE OBJECTIVE(S)

To provide health care providers with guidance regarding current standards of care for hypertension screening in adult patients

## TARGET POPULATION

Patients over 18 years of age (per JNC-VI [Sixth Report of the Joint Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure] standards and recommendations for treatment, adults are defined as over 18 years of age)

## INTERVENTIONS AND PRACTICES CONSIDERED

### Screening/Diagnosis

1. Subjective assessment
  - History
  - Symptoms
  - Past medical history
  - Medication history
  - Family history
  - Psychosocial history
  - Dietary history
2. Objective assessment
  - Hypertension measurement
  - Physical exam
3. Diagnostic procedures (e.g. complete blood count, creatinine, glucose, potassium, lipid profile, complete urinalysis)
4. Additional testing as warranted (e.g. 12 lead electrocardiogram and/or echocardiogram, uric acid, urine microalbumin, serum calcium)
5. Categorization of blood pressure as optimal, normal, high-normal
6. Staging of hypertension as stage 1, 2, or 3
7. Follow-up recommendations based on screening measurement
8. Unique screening considerations (e.g., patients with diabetes or renal insufficiency, patients with white coat syndrome, and home blood pressure monitoring)

## MAJOR OUTCOMES CONSIDERED

- Adult systolic and diastolic blood pressure readings
- Incidence of hypertension in adults
- Hypertension-related morbidity and mortality among adults

## METHODOLOGY

### METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)  
Searches of Electronic Databases

#### DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Online searches of PubMed, Medline, CINAHL databases were performed using the major keywords of hypertension screening, guidelines, controlled trials and published in the last 5 years.

#### NUMBER OF SOURCE DOCUMENTS

Not stated

#### METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Expert Consensus

#### RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

#### METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review

#### DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

#### METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

#### RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

#### COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

#### METHOD OF GUIDELINE VALIDATION

Peer Review

#### DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

A draft of the guideline was developed by group of family nurse practitioner (FNP) students and submitted for review to the Family Nurse Practitioner program faculty for review. Revisions made after recommendations were received.

## RECOMMENDATIONS

### MAJOR RECOMMENDATIONS

- Screening blood pressure measurement should be obtained from any patient greater than or equal to 18 years of age in the health care system at every health care encounter.
- A diagnosis of hypertension is not typically made based on the first elevated blood pressure reading. Wide fluctuations in readings are common, even in normotensive individuals.
- After any elevated reading, a second measurement should be performed during the same patient visit.
- Elevated blood pressure readings should be confirmed on the contralateral arm and the higher level used for management guidance.
- The diagnosis of hypertension is based on the average of two or more elevated blood pressure readings taken at each of two or more visits after an initial screening.
- The interval for follow-up measurements should be based on the initial reading and the following table:

Initial Blood Pressure Measurement		Recommended Follow-up Interval
Systolic	Diastolic	
<130	<85	Recheck in 2 years
130-139	85-89	Recheck in 1 year
140-159	90-99	Confirm within 2 months
160-179	100-109	Evaluate or refer within 1 month
>180	>110	Evaluate or refer immediately or within 1 week depending on the clinical situation

- If the systolic and diastolic categories are different, the recommendations for the shorter follow-up should be utilized.
- Unusually low readings should be evaluated for clinical significance.
- Scheduling of follow-up should be modified by reliable information about past blood pressure measurements, other cardiovascular risk factors or target-organ disease.
- Further evaluation is necessary once screening has lead to a diagnosis of hypertension to include a history, physical examination and diagnostic

laboratory procedures. These are necessary to accurately determine blood pressure stage and risk group stratification for appropriate management.

#### CLINICAL ALGORITHM(S)

An algorithm is provided in the original guideline document for the screening for hypertension and follow up measurement.

### EVIDENCE SUPPORTING THE RECOMMENDATIONS

#### TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is not specifically stated for each recommendation.

### BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

#### POTENTIAL BENEFITS

- Prompt and appropriate initiation of proper management interventions for adult patient with hypertension
- Treatment of hypertension to improve prognosis by preventing end target organ damage and death

#### POTENTIAL HARMS

Over/under monitoring before initiating treatment:

The inherent inconsistencies of office measurement, white coat syndrome, and variations in blood pressure over the course of the day may lead to inaccurate determination of true blood pressure.

Subgroups Most Likely to be Harmed:

Patients experiencing white coat syndrome, borderline or stage 1 hypertension

### QUALIFYING STATEMENTS

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This guideline is not intended to direct the treatment of pediatric or pregnant patients. Pediatric and pregnant patients with chronic or acute hypertension should be managed in consultation with an appropriate specialist.

### IMPLEMENTATION OF THE GUIDELINE

#### DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

## INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

### IOM CARE NEED

Staying Healthy

### IOM DOMAIN

Effectiveness

## IDENTIFYING INFORMATION AND AVAILABILITY

### BIBLIOGRAPHIC SOURCE(S)

University of Texas at Austin, School of Nursing, Family Nurse Practitioner Program. Screening for hypertension in adults. Austin (TX): University of Texas at Austin, School of Nursing; 2002 May. 9 p. [30 references]

### ADAPTATION

The guideline draws heavily from the Sixth Report of the Joint National on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC-VI), 1997 and the Department of Veterans Affairs/Department of Defense Hypertension Guideline, 1999.

### DATE RELEASED

2002 May

### GUIDELINE DEVELOPER(S)

University of Texas at Austin School of Nursing, Family Nurse Practitioner Program  
- Academic Institution

### SOURCE(S) OF FUNDING

Not stated

### GUIDELINE COMMITTEE

Practice Guidelines Committee

### COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Authors: Terri Harvey, RN, BSN, MSN; Byron Lee Myers, RN, BSN, MSN;  
Stephanie Tomasek, RN, BSN, MSN

## FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

## GUIDELINE STATUS

This is the current release of the guideline.

An update is not in progress at this time

## GUIDELINE AVAILABILITY

Electronic copies: The following formats are available:

- [HTML](#)
- [Portable Document Format \(PDF\)](#)
- [ASCII Text](#)

Print copies: Available from the University of Texas at Austin, School of Nursing.  
1700 Red River, Austin, Texas, 78701-1499.

## AVAILABILITY OF COMPANION DOCUMENTS

None available

## PATIENT RESOURCES

None available

## NGC STATUS

This NGC summary was completed by ECRI on October 3, 2002. The information was verified by the guideline developer on October 16, 2002.

## COPYRIGHT STATEMENT

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